

What Is Claimed Is:

1. Apparatus for effecting a desired geometric  
change the annulus of a heart valve and limiting  
mitral leaflet prolapse, said apparatus comprising:

first and second plication bands, each said  
plication band comprising:

first and second legs each having a first  
end, said first ends of said first and second legs  
having a tissue piercing configuration; and

a bridge having first and second ends, said  
first end of said bridge being connected to said first  
leg and said second end of said bridge being connected  
to said second leg such that said first ends of said  
first and second legs are separated by a first given  
distance;

said bridge being configured such that when  
said first ends of said first and second legs have  
pierced tissue at said first given distance, said  
bridge may be deformed so as to cause said first ends  
of said first and second legs to move toward one

another so as to thereafter be separated by a second,  
shorter given distance, whereby said first and second  
legs gather together the pierced tissue to effect a  
desired geometric change in the annulus of the heart  
valve; and

a linking construct connected to said first and  
second plication bands.

2.. A method for effecting a desired geometric  
change the annulus of a heart valve and limiting  
mitral leaflet prolapse, said method comprising the  
steps of:

providing apparatus for effecting a desired  
geometric change in the annulus of a heart valve, said  
apparatus comprising:

first and second plication bands, each said  
plication band comprising:

first and second legs each having a  
first end, said first ends of said first and second  
legs having a tissue piercing configuration; and

a bridge having first and second ends,

said first end of said bridge being connected to said first leg and said second end of said bridge being connected to said second leg such that said first ends of said first and second legs are separated by a first given distance;

said bridge being configured such that when said first ends of said first and second legs have pierced tissue at said first given distance, said bridge may be deformed so as to cause said first ends of said first and second legs to move toward one another so as to thereafter be separated by a second, shorter given distance, whereby said first and second legs gather together the pierced tissue to effect a desired geometric change in the annulus of the heart valve; and

a linking construct connected to said first and second plication bands;

deploying said first plication band in tissue, and deploying said second plication band in tissue such that said linking construct extends across the

5

Variable	Mean	SD	Min	Max	Skewness	Kurtosis	Normality
Age	35.2	12.5	18	65	0.15	3.2	0.98
Gender	0.52	0.50	0	1	-0.02	3.0	0.99
Marital Status	0.68	0.47	0	1	0.10	3.1	0.99
Education	12.5	2.1	9	16	-0.10	3.3	0.98
Income	15.2	8.5	5	35	0.20	3.4	0.97
Occupation	1.2	0.8	0	2	-0.05	3.0	0.99
Religion	1.5	0.7	0	3	0.10	3.1	0.99
Political Party	1.8	0.9	0	4	-0.05	3.0	0.99
Health Status	1.2	0.4	0	2	-0.02	3.0	0.99
Smoking Status	0.35	0.48	0	1	-0.02	3.0	0.99
Alcohol Consumption	0.25	0.43	0	1	-0.02	3.0	0.99
Exercise Frequency	1.5	1.2	0	4	0.10	3.1	0.99
Dietary Habits	1.8	1.0	0	4	0.10	3.1	0.99
Stress Level	2.5	1.5	0	5	0.10	3.1	0.99
Sleep Quality	1.5	1.0	0	4	0.10	3.1	0.99
Mental Health	1.2	0.8	0	2	-0.05	3.0	0.99
Physical Health	1.5	1.0	0	4	0.10	3.1	0.99
Life Satisfaction	3.5	1.2	1	5	-0.10	3.3	0.98
Overall Well-being	3.8	1.3	1	5	-0.10	3.3	0.98